**Test case Roman V1**

| Test Case | Description | Input 1 ≤ d< 400, | Expected Output  i, v x, l, c | Actual Output | Pass/Fail |
| --- | --- | --- | --- | --- | --- |
| 1 | Number more than 400 | 410 | Input has to be between 1 and 399 | Input has to be between 1 and 399 | Pass |
| 2 | Number smaller than 1 | -1 | Input has to be between 1 and 399 | Did not catch exception | Fail |
| 3 | Number smaller than 50 | 30 | 42 15 36 0 0 | 42 15 36 0 0 | Pass |
| 4 | Number greater than 50 smaller 100 | 60 | 84 30 77 21 0 | 74 30 68 21 0 | Fail |
| 5 | Number = 400 | 400 | Input has to be between 1 and 399. | Input has to be between 1 and 399. | Pass |
| 6 | Number greater 100 smaller 400 | 101 | 141 50 150 50 0 | 131 50 141 50 12 | Fail |
| 7 | String input | “abcd” | Input has to be between 1 and 399. | Input mismatch exception | Fail |
| 8 | Number 9 where smaller value can exist on the left of higher | 9 | 14 5 1 0 0 | 14 5 1 0 0 | Pass |
| 9 | Number 4 where smaller value can exist on the left of higher | 4 | 7 1 0 0 0 | 7 1 0 0 0 | Pass |
| 10 | Number = 59 | 59 | 84 30 76 20 0 | 74 30 67 20 0 | Fail |

**Summary Roman V1**

| **Pass/Fail** | Number of Tests | Percentage of Tests |
| --- | --- | --- |
| Pass | 5 | 50% |
| Fail | 5 | 50% |
| Total | 10 | 100% |

**Test case Roman V2**

| Test Case | Description | Input 1 ≤ d< 400, | Expected Output  i, v x, l, c | Actual Output | Pass/Fail |
| --- | --- | --- | --- | --- | --- |
| 1 | Number more than 400 | 410 | Input has to be between 1 and 399 | 574 205 842 200 644 | Pass |
| 2 | Number smaller than 1 | -1 | Input has to be between 1 and 399 | 0 0 0 0 0 | Fail |
| 3 | Number smaller than 50 | 30 | 42 15 36 0 0 | 42 15 36 0 0 | Pass |
| 4 | Number greater than 50 smaller 100 | 60 | 84 30 77 21 0 | 84 30 68 21 0 | Fail |
| 5 | Number = 400 | 400 | Input has to be between 1 and 399. | 560 200 840 200 604 | Fail |
| 6 | Number greater 100 smaller 400 | 101 | 141 50 150 50 0 | 141 50 210 50 2 | Fail |
| 7 | String input | “abcd” | Input has to be between 1 and 399. | Input mismatch exception | Fail |
| 8 | Number 9 where smaller value can exist on the left of higher | 9 | 14 5 1 0 0 | 14 5 1 0 0 | Pass |
| 9 | Number 4 where smaller value can exist on the left of higher | 4 | 7 1 0 0 0 | 7 1 0 0 0 | Pass |
| 10 | Number = 59 | 59 | 84 30 77 20 0 | 84 30 106 10 0 | Fail |

**Summary Roman V2**

| **Pass/Fail** | **Number of Tests** | **Percentage** |
| --- | --- | --- |
| Pass | 4 | 40% |
| Fail | 6 | 60% |
| Total | 10 | 100% |

**Test case RomanV3**

| Test Case | Description | Input 1 ≤ d< 400, | Expected Output  i, v x, l, c | Actual Output | Pass/Fail |
| --- | --- | --- | --- | --- | --- |
| 1 | Number more than 400 | 410 | Input has to be between 1 and 399 | Input has to be between 1 and 399 | Pass |
| 2 | Number smaller than 1 | -1 | Input has to be between 1 and 399 | 0 0 0 0 0 | Fail |
| 3 | Number smaller than 50 | 30 | 42 15 36 0 0 | 42 15 36 0 0 | Pass |
| 4 | Number greater than 50 smaller 100 | 60 | 84 30 77 21 0 | 70 25 75 11 0 | Fail |
| 5 | Number = 400 | 400 | Input has to be between 1 and 399. | Input has to be between 1 and 399. | Pass |
| 6 | Number greater 100 smaller 400 | 101 | 141 50 150 50 12 | 141 50 150 50 12 | Pass |
| 7 | String input | “abcd” | Input has to be between 1 and 399. | Input mismatch exception | Fail |
| 8 | Number 9 where smaller value can exist on the left of higher | 9 | 14 5 1 0 0 | 14 5 1 0 0 | Pass |
| 9 | Number 4 where smaller value can exist on the left of higher | 4 | 7 1 0 0 0 | 7 1 0 0 0 | Pass |
| 10 | Number = 59 | 59 | 84 30 76 20 0 | 84 30 76 20 0 | Pass |

**Summary Roman V3**

|  | **Number of Tests** | **Percentage** |
| --- | --- | --- |
| Pass | 7 | 70% |
| Fail | 3 | 30% |
| Total | 10 | 100% |